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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,482	07/08/2003	Behzad Imani	544952000100	9738

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EXAMINER

STAFIRA, MICHAEL PATRICK

ART UNIT PAPER NUMBER

2877

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,482

Applicant(s)

IMANI ET AL

Examiner

Michael P. Stafira

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/26/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed August 19, 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Examiner has noted that an IDS was file August 19, 2004, but a copy of the PTO-1449 cannot be found. In response to is office action please supply a copy of the PTO-1449 so that the prior art can be considered.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

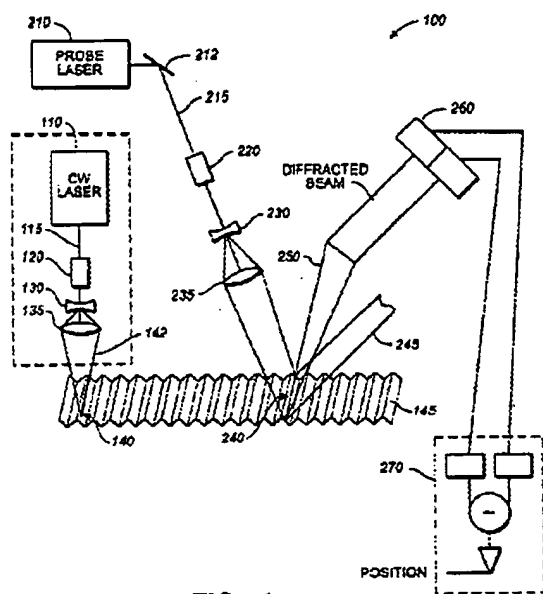
2. Claims 1, 5-10, 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Janik ('099).

Claim 1

Janik ('099) discloses providing a disturbance (Fig. 1, Ref. 14) at a surface of the film (Fig. 1, Ref. 145); directing a light beam (Fig. 1, Ref. 210) onto the film (Fig. 1, Ref. 145) so as

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to generate electron density waves in the film (Col. 3, lines 55-65); detecting (Fig. 1, Ref. 260) an intensity of the light beam reflected from the film (Fig. 1, Ref. 145); and determining the characteristic of the film from the detected intensity as a function of the reflectance angle (Col. 3, lines 28-55).

**FIG. 1****Claim 5**

Janik ('099) further discloses the disturbance is provided by directing a beam of energy (Fig. 1, Ref. 110) onto the film (Fig. 1, Ref. 145).

Claim 6

Janik ('099) further discloses the disturbance as provided by directing a pulse of coherent light onto the film (Col. 3, lines 15-20).

Claim 7

The reference of Janik ('099) further discloses the film comprises a metal (Col. 3, lines 13-14).

Claim 8

Janik ('099) further discloses a diameter of the probe beam (Fig. 1, Ref. 240) at the surface of the film (Fig. 1, Ref. 145) is greater than the diameter of the excitation beam (Fig. 1, Ref. 140) at the surface of the film (Fig. 1, Ref. 145).

Claim 9

The reference of Janik ('099) further discloses determining a resonance angle of the light beam associated with a change in the detected intensity of the light beam as a function of angle (Col. 3, lines 35-54).

Claim 10

Janik ('099) further discloses the characteristic of the film is its thickness (See Abstract).

Claim 12

Janik ('099) discloses the disturbance is a surface acoustic wave (See Abstract).

Claim 13

Janik ('099) further discloses the disturbance is such as to allow the generation of the electron density waves by the light beam from a far-field (See Fig. 1).

Claim 14

Janik ('099) discloses a support (Substrate) for the conductive film (Thin Film) (Col. 3, lines 60-63); a source of energy (Fig. 1, Ref. 110) arranged to direct the energy onto the film (Fig. 1, Ref. 145) on the support, thereby to provide a disturbance in the film (See Abstract); a source of a light beam (Fig. 1, Ref. 210) arranged to direct the light beam onto the film (Fig. 1, Ref. 145) to generate electron density waves in the film (Fig. 1, Ref. 145); and a detector (Fig. 1, Ref. 260) arranged to receive light from the light beam reflected from the film at different angles

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(Col. 3, lines 25-55), thereby to determine the characteristic of the film from the reflected intensity of the light as a function of angle (See Abstract).

Claim 15

Janik ('099) further discloses the source of energy and the source of the light beam are both lasers (Fig. 1, Ref. 110, 210).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-4, 11, 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janik ('099).

Claims 2-4

Janik ('099) discloses the claimed invention except for the film thickness is less than 300 nm or 100nm or film is a skin depth. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Janik ('099) with the different thickness above since it was well known in the art that measuring different thickness increases the usability of the instrument, therefore increasing the marketability.

Claims 11, 16

Janik ('099) discloses the claimed invention except for polarizing the light beam before reflection from the film. It would have been obvious to one having ordinary skill in the art at the

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time the invention was made to combine Janik ('099) with polarizing light beam since it was well known in the art that polarizing the light beam before reflection decreases the amount of background noise detected by the detectors, therefore producing a more accurate measurement.

Claim 17

Janik ('099) discloses the claimed invention except for the detector is a CCD camera. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Janik ('099) with the CCD camera since it was well known in the art that CCD cameras increase the sensitivity of the measurement, because they provide an array of detection element over an area.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 571-272-2430. The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Michael P. Stafira
Primary Examiner
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April 14, 2005